A F F I D A V I T

CITY OF WASHINGTON,)
DISTRICT OF COLUMBIA) ss:

Kevin T. Fisher, having been duly sworn, deposes and says that:

1. He is a broadcasting consultant practicing in the City of Washington, District of Columbia; he is an associate of the firm of Smith and Powstenko; and his qualifications are a matter of record before the Federal Communications Commission.

2. The firm of Smith and Powstenko has been retained by TRINITY BROADCASTING NETWORK, INC., permittee of Television Translator K48CG, Channel 48, Loveland, Colorado, to prepare engineering data in support of its application for a minor change in the facilities proposed in BMPTTL-870619IF.

3. The foregoing statements and the attached Engineering Report, which was prepared by him or under his immediate supervision, are true and correct to the best of his knowledge and belief.

KEVIN T. FISHER

Subscribed and sworn to before me this 22 day of February, 1988.

NOTARY PUBLIC, D. C.

My Commission Expires February 14, 1993

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, INC., permittee of Television Translator K48CG, Channel 48, Loveland, Colorado, in support of its application for a minor modification of Construction Permit BMPTTL-870619IF. It is proposed herein to change antenna site, as well as to change effective antenna height and effective radiated power.

The newly proposed site, shown in Exhibit B, is 3.0 miles north of the authorized site and is well within the authorized 74 dbu contour. [It is important to note that no USGS quadrangle for this exhibit is locally available.] There exists at the proposed site a tower on which KLOV and KLOV-FM are located. It is believed that the proposed K48CG operation will not interfere with the operation of these facilities. However, if such should occur as a result of the proposed operation, applicant will assume responsibility for correcting any interference problem.

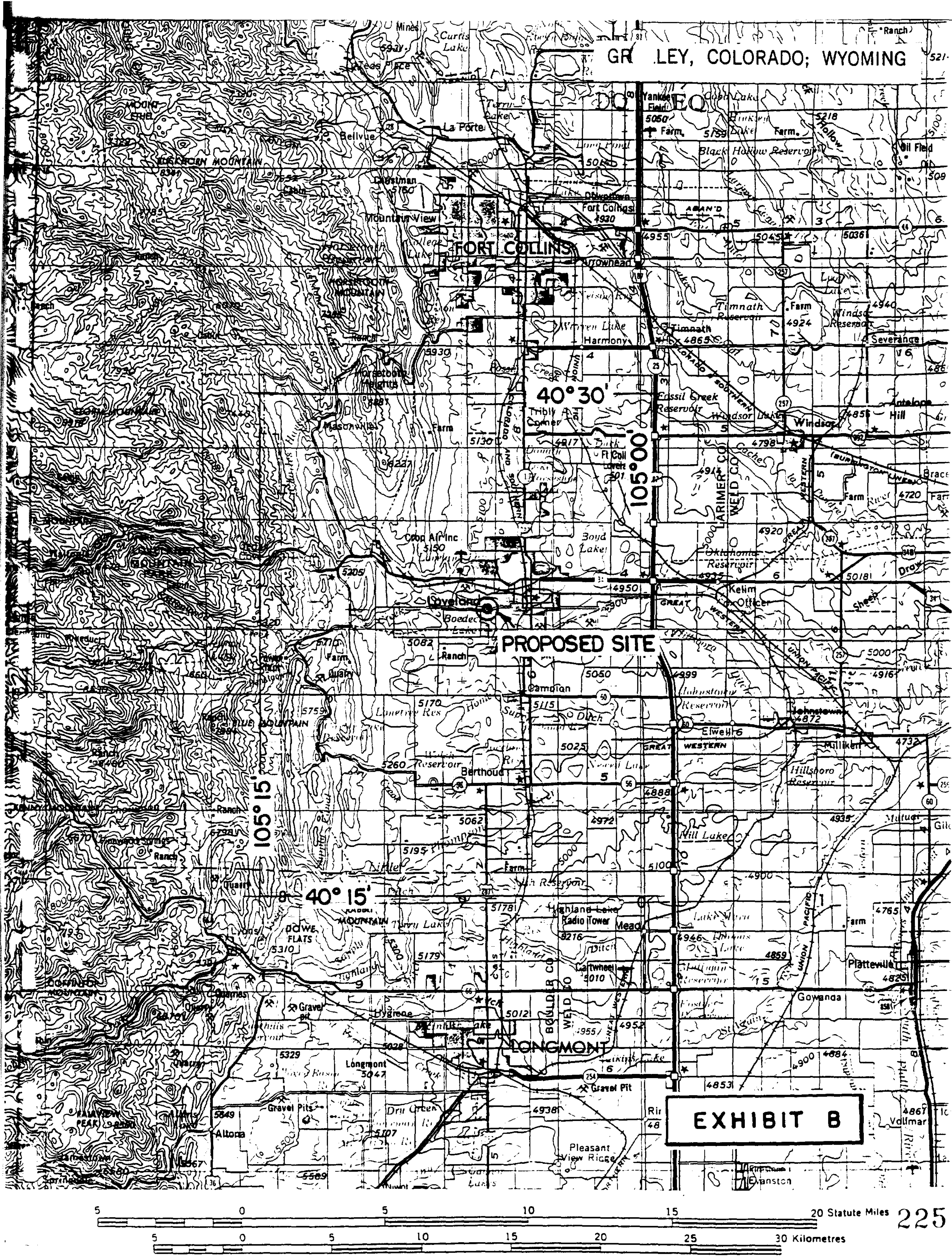
Exhibit C is a sketch of the proposed antenna mounted at the top of the supporting structure. Exhibit D gives radiation parameters for the proposed antenna. Exhibit E details the reasoning behind the classification of these changes as "minor" within the context of the Commission's Rules. In the first tabulation, Exhibit E-1, the *authorized* 74 dbu contour distance along each of the standard eight radials is calculated based on the relative field values, effective antenna heights, maximum ERP, and the

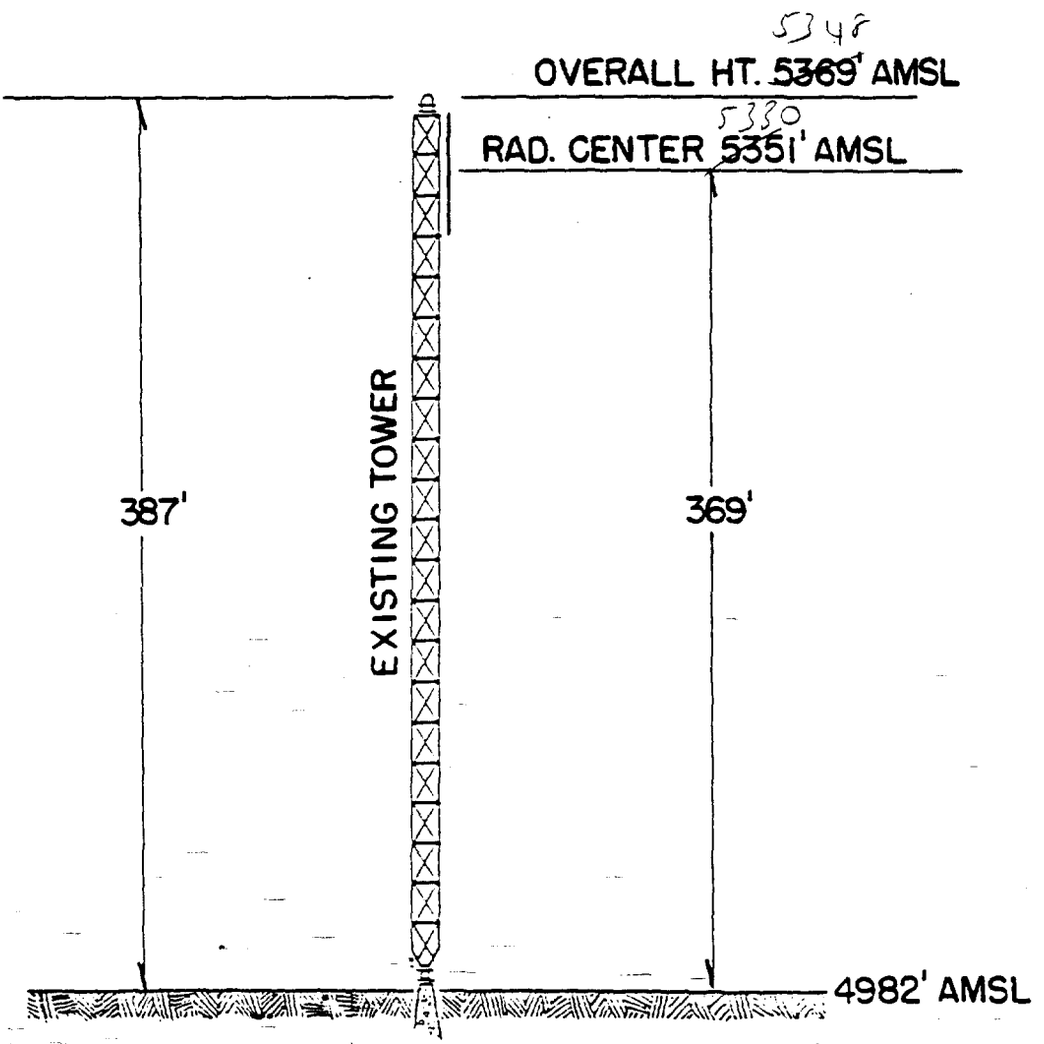
EXHIBIT A

FCC's F (50, 50) curves for UHF propagation. In the second tabulation, Exhibit D-2, the *allowable* ERP at the new site is derived for each of the eight radials and compared with the calculated ERP from the facility proposed herein. As shown, the terrain-factored ERP of the proposed facility never exceeds that permitted under the authorized parameters. Thus, the proposed 74 dbu contour is contained within that already authorized, making these changes "minor" in nature.

Since no change in the overall height or location of the existing structure is proposed, the FAA has not been notified of this proposal.

Because the FCC now considers the purported biological effects of non-ionizing electromagnetic radiation from broadcast sources in its environmental determinations, this subject has been studied with respect to the proposed facility. Assuming an effective radiated power of 4.2 kw (average visual ERP plus aural ERP [assumed to be 20 percent of peak visual ERP]), an effective antenna height of 112.5 meters above ground, and maximum radiation oriented directly downward (certainly a worst-case assumption), the maximum calculated power density at the base of the tower is 0.011 mw/cm^2. According to the FCC's technical bulletin on the subject, the maximum allowable power density for a facility operating on Channel 48 (674-680 MHz) is 2.3 mw/cm^2. Thus, no significant impact on present levels of non-ionizing radiation would be expected to result from a grant of this proposal.


GR .LEY, COLORADO; WYOMING
FORT COLLINS
La Porte
Bellvue
Mountain View
Arrowhead
Timnath
Harmony
Severance
Windsor
40°30'
105°00'
LARIMER CO
WELD CO
Fossil Creek Reservoir
Boyd Lake
Loveland
PROPOSED SITE
Campion
Johnstown
Milliken
Berthoud
105°15'
40°15'
Lyons
Mead
Platteville
Gowanda
LONGMONT
Hygiene
BOULDER CO
WELD CO
EXHIBIT B
Pleasant View Ridge
Altona
Vollmar
Evanston
5 0 5 10 15 20 Statute Miles
5 0 5 10 15 20 25 30 Kilometres



SITE COORDINATES

40° 23' 31"
105° 05' 51"

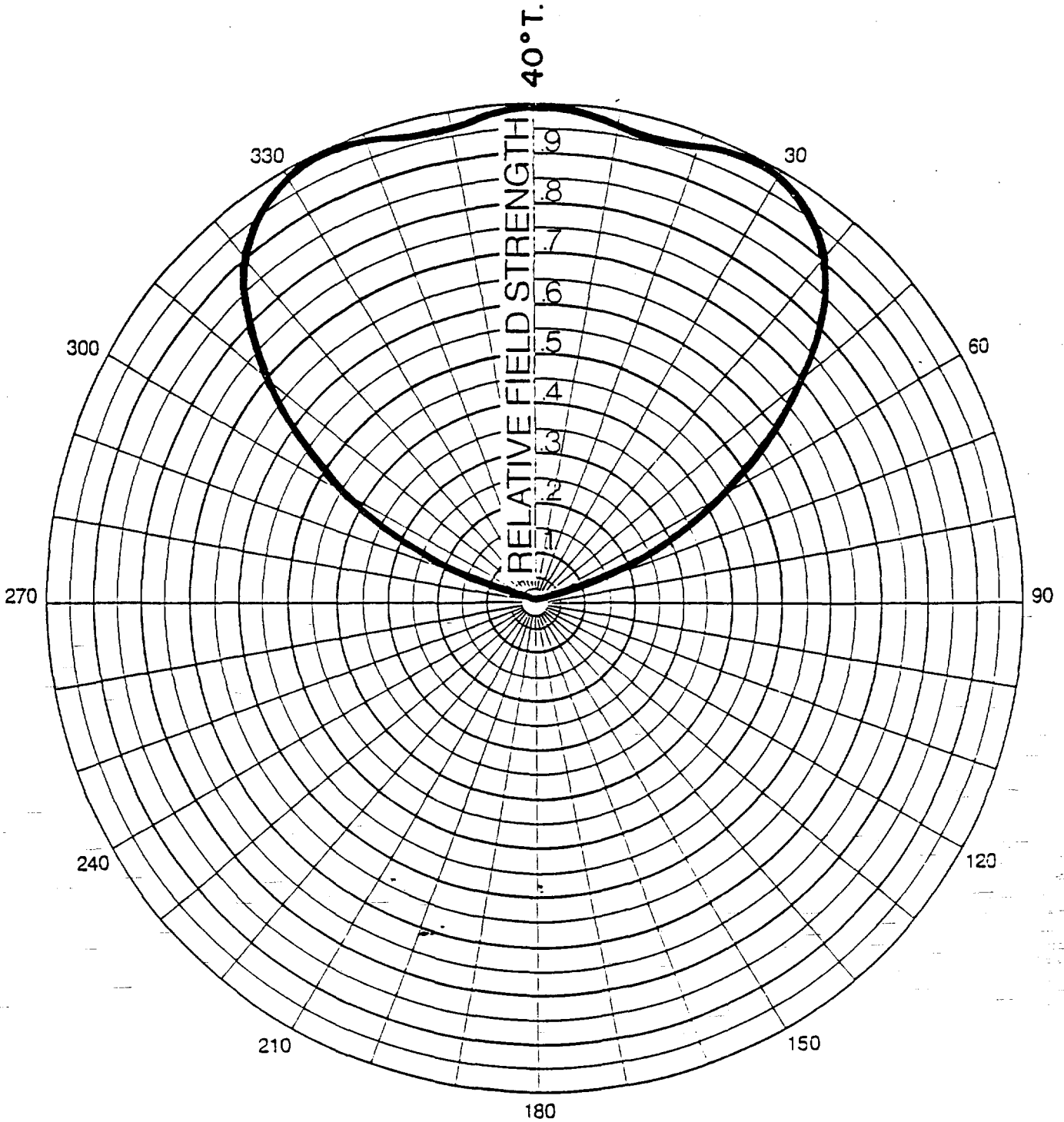
EXHIBIT C

NOT TO SCALE

BOGNER ANTENNAS

HORIZONTAL PLANE PATTERN

PATTERN S
LOW AND MEDIUM POWER
ANTENNAS - CATALOG 301



Bogner Broadcast Equipment Corp.
401 Railroad Avenue, Westbury, N.Y. 11590
Tel: (516) 997-7800

EXHIBIT D-1

EXHIBIT D-2

ANTENNA RADIATION PATTERN DATA

TRINITY BROADCASTING NETWORK, INC.

PROPOSED TELEVISION TRANSLATOR K48CG
CHANNEL 48 - LOVELAND, COLORADO
[MODIFICATION OF BMPTTL-870619IF]

Azimuth (° T)	Relative Field	ERP (dbk)	Azimuth (° T)	Relative Field	ERP (dbk)
0	0.89	7.4	180	0.03	- 22.0
10	0.99	8.4	190	0.03	- 22.0
20	0.97	8.2	200	0.03	- 22.0
30	0.96	8.1	210	0.03	- 22.0
40	1.00	8.5	220	0.03	- 22.0
50	0.96	8.1	230	0.03	- 22.0
60	0.97	8.2	240	0.03	- 22.0
70	0.99	8.4	250	0.03	- 22.0
80	0.89	7.4	260	0.03	- 22.0
90	0.69	5.2	270	0.03	- 22.0
100	0.40	0.5	280	0.03	- 22.0
110	0.15	- 8.0	290	0.03	- 22.0
120	0.03	- 22.0	300	0.03	- 22.0
130	0.03	- 22.0	310	0.03	- 22.0
140	0.03	- 22.0	320	0.03	- 22.0
150	0.03	- 22.0	330	0.15	- 8.0
160	0.03	- 22.0	340	0.40	0.5
170	0.03	- 22.0	350	0.69	5.2

EXHIBIT E-1

AUTHORIZED ELEVATION AND CONTOUR DATA

TRINITY BROADCASTING NETWORK, INC.

PROPOSED TELEVISION TRANSLATOR K48CG
CHANNEL 48 - LOVELAND, COLORADO
[MODIFICATION OF BMPTTL-870619IF]

Azimuth (° T)	Average Elevation 2 to 10 Miles* (feet AMSL)	Effective Antenna Height (feet AMSL)	ERP (dbk)	Mileage to 74 dbu Contour
0	5068	180	17.1	10.2
45	4963	285	16.9	12.6
90	5006	242	9.2	7.4
135	5000	248	-13.3	2.1
180	5074	174	-13.3	1.8
225	5410	-162	-13.3	1.4
270	5923	-675	-13.3	1.4
315	5330	-82	-3.7	2.3

* Determined by computer

Height of radiation center above mean sea level	5248 feet
Effective radiated power	52.7 kw
Antenna make and model	Bogner B16US
Antenna orientation	30° T

Geographic Coordinates

North latitude: 40° 20' 53"
West longitude: 105° 06' 13"

EXHIBIT E-2

PROPOSED ELEVATION AND CONTOUR DATA

TRINITY BROADCASTING NETWORK, INC.

PROPOSED TELEVISION TRANSLATOR K48CG
CHANNEL 48 - LOVELAND, COLORADO
[MODIFICATION OF BMPTTL-870619IF]

Azimuth (° T)	Allowable Mileage to 74 dbu Contour	Avg. Elev. 2-10 Miles* (feet AMSL)	Effective Ant. Height (feet AMSL)	Allowable ERP** (dbk)	Proposed ERP (dbk)
0	7.3	5065	286	7.5	7.4
45	10.0	4943	408	10	8.2
90	8.6	4883	468	6	5.2
135	6.3	4990	361	3	- 22.0
180	4.8	5049	302	- 0.5	- 22.0
225	2.6	5451	- 100	- 2	- 22.0
270	2.0	5697	- 346	- 6	- 22.0
315	2.9	5380	- 29	0	- 22.0

* Determined by computer

** Based upon FCC F(50, 50) curves for given antenna height AAT and allowable distance

Height of radiation center above mean sea level	5351 feet
Effective radiated power	7.0 kw
Antenna make and model	Bogner B16US
Antenna orientation	40° T

Geographic Coordinates

North latitude:	40°	23'	31"
West longitude:	105°	05'	51"

Section VI **ENGINEERING DATA**

1. Facilities requested:

a. Output Channel No.	Transmitter Rated Power Output	Proposed Principal Community(ies) to be served City	State
48	1000 w	LOVELAND	CO

Frequency 674-680 MHz.

Primary station (*station to be rebroadcast — Translator station only*)

Call Sign	City	State	Frequency
KTBN-TV	SANTA ANA	CA	626-632 MHz.

b. Offset (Low Power TV and TV Translator Stations only) *(Check one of the following)*

☒ No offset ☐ Zero offset ☐ Plus offset ☐ Minus offset

c. Input Channel Frequency No. SatCom 3R - Transponder 3 MHz.

If station is to operate via another translator station, indicate call sign and location of final intermediate translator.

Does not apply

2. Proposed transmitter location:

City LOVELAND State CO

County LARIMER

Address or other description of location:

On existing KLOV-FM tower, near corner of West First and Taft Ave.

Geographical coordinates of transmitting antenna to nearest second

North Latitude 40° 23' 31" West Longitude 105° 05' 51"

Attach as Exhibit No. B a map or maps (preferably topographic, if obtainable, such as Geological Survey quadrangles) for of the area of the proposed transmitter location shown drawn thereon the following data:

a. Scale of miles.
b. Proposed transmitter location accurately plotted.
c. Principal community to be served by the proposed station, clearly identified and labeled.

	Make	Type No.	Length	Output Power
3. Transmitter:	TTC	XL1000MU		0.198 kw.
4. Transmission line:	Andrew	LDF7-50A	400 feet	Rated efficiency E for length given (decimal fraction) 0.537

5. Transmitting antenna ☒ Directional ☐ Non-Directional

Manufacturer	Model[1]	Description[1]
Bogner	B16US	Slotted cylinder

Orientation[2]	Height above ground[3]	Elevation of Site[4]	Power gain G (*multiplier*) in lobe of maximum radiation relative to a halfway dipole.[5]
40° T	387 feet	4982 feet	66.0

Effective radiated power (ERP) (ERP=P X E X G) 7.0 kw.

Height of antenna radiation center above mean sea level 5351 ft.

[1]Give basic type using general descriptive terms such as half-wave dipole, "bow-tie" with screen, corner reflector, 10 element Yagi, 4 element in-phase array, two stacked 5 element Yagis, etc.
[2]Show the direction of the main radiation lobe in degrees with respect to true north in a 360 degree horizontal azimuth, numbered clockwise, with true north as zero azimuth.
[3]Show height to topmost portion of structure, including highest top mounted antenna and beacon if any.
[4]Show the ground elevation above mean sea level at the base of the transmitting antenna supporting structure.
[5]Give the actual power gain toward the radio horizon

6. Attach as Exhibit No. C a vertical plan sketch for the proposed total structure(s) including supporting structure(s), giving height of center of radiation above ground, overall height of structure above ground, including lighting beacon (if any) and height above mean sea level in feet for all significant features for BOTH RECEIVING AND TRANSMITTING ANTENNAS. Also indicate any horizontal separation between receiving and transmitting antennas.

7. Will the proposed antenna supporting structure be shared with another station or stations of any class?

If Yes, list the call signs and class of such stations. ☒ YES ☐ NO

KLOV, KLOV-FM

8. Attach as Exhibit No. D a polar diagram of the radiation pattern (relative field) of the transmitting antenna showing clearly the correct relationship between the major lobe or lobes and the minor lobes of radiation and a tabulation of the pattern at every ten degrees and all maxima and minima. Applicants proposing use of multiple transmitting antennas shall submit a composite radiation pattern. If a non directional transmitting antenna will be employed, i.e. an antenna with an approximately circular radiation pattern, check here ☐ and omit polar diagram.

9. Has FAA been notified of proposed construction? ☐ YES ☒ NO
[No change in overall height or location of existing tower]
If Yes, give date and office where notice was filed.

10. Unattended operation:

a. Is unattended operation proposed? ☒ YES ☐ NO

If Yes, and this application is for authority to construct a new station or to make changes in the facilities of an authorized station which proposes unattended operation for the first time, applicant will comply with the several requirements of Section 74.734 (TV Translators) or Section 74.1234 (FM Translators) of the Rules concerning unattended operation.

b. In space below state name, address and telephone number of a person or persons who may be contacted in an emergency to suspend operation of the translator should such action be deemed necessary by the Commission.

Name	Address *(street or other description)*	City	State	Telephone No. *(include area code)*
Ben Miller	TRINITY BROADCASTING NETWORK, INC. P. O. Box A	Santa Ana,	California 92711	(714) 832-2950

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

[signature] 2/22/88. (202) 293-7742

Signature (Print name below) Date Telephone No. *(include area code)*

☐ Technical Director ☐ Registered Professional Engineer ☒ Consulting Engineer

☐ Chief Operator ☐ Other (*specify*)

JOSEPH E. DUNNE III
COLBY M. MAY*

*ALSO ADMITTED IN VIRGINIA

MAY & DUNNE
CHARTERED
ATTORNEYS AT LAW
1156 - 15TH STREET, N.W.
SUITE 515
WASHINGTON, D.C. 20005-1704
(202) 223-9013

RICHARD G. GAY
OF COUNSEL

TELECOPIER NO.
(202) 223-6992

May 24, 1988

HAND DELIVER

H. Walker Feaster, III
Acting Secretary
Federal Communications Commission
Washington, D.C. 20554

RE: Trinity Christian Center of Santa Ana, Inc., d/b/a Trinity Broadcasting Network, Licensee of K47BE, Boise, Idaho, Application for Modification of License (BLTTL-871217ID)

Dear Mr. Feaster:

Filed herewith, in triplicate, on behalf of the referenced licensee is a minor modification application for LPTV facility K47BE, Boise, Idaho. This modification involves a change in the K47BE antenna site, an increase in the effective antenna height, and a decrease in the effective radiated power.

Since this amendment will be processed as a minor change, no fee is required in accordance with Commission rule 1.1104.

If any questions should arise concerning this matter, kindly contact the undersigned directly.

Respectfully submitted,

TRINITY CHRISTIAN CENTER OF SANTA ANA, INC., d/b/a TRINITY BROADCASTING NETWORK

By: _____
Colby M. May
Its Attorney

CMM:gmcB78
xc: Mrs. Jane Duff

Federal Communications Commission
Washington, D.C. 20554

3060-0016
Expires 1/31/91

APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE CHANGES IN A LOW POWER TV, TV TRANSLATOR OR TV BOOSTER STATION

(Carefully read instructions before filling out form - RETURN ONLY FORM TO FCC)

For Commission Fee Use Only	FEE NO:	For Applicant Fee Use Only
	FEE TYPE:	Is a fee submitted with this application? ☐ Yes ☒ No
	FEE AMT:	If No, indicate reason therefor (check one box): ☒ Nonfeeable application
	ID SEQ:	Fee Exempt (See 47 C.F.R. Section 1.1112) ☐ Noncommercial educational licensee ☐ Governmental entity

For Commission Use Only
File No.

SECTION I - GENERAL INFORMATION

1. Name of Applicant	Address		
Trinity Christian Center of Santa Ana, Inc., d/b/a Trinity Broadcasting Network	P.O. Box C-11949		
	City: Santa Ana	State: CA	Zip Code: 92711
	Telephone No. (include area code): 1-714-832-2950		

2. This application is for: (check one box)

☒ Low Power Television ☐ TV Translator ☐ TV Booster

(a) Proposed Channel No.	(b) Community to be served:	
	City	State
47	Boise	ID

(c) Check one of the following boxes:

☐ Application for NEW station

☐ MAJOR change in licensed facilities, call sign: .....

☒ MINOR change in licensed facilities; call sign: K47BE

☐ MAJOR modification of construction permit; call sign: .....

File No. of Construction Permit: _____

☐ MINOR modification of construction permit; call sign: .....

File No. of Construction Permit: _____

☐ AMENDMENT to pending application; Application file number: .....

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Sections I and VII and those other portions of the form that contain the amended information.

SECTION VI - EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

1. For Low Power TV applicants, will this station employ on a full-time basis five or more persons? ☐ Yes ☒ No

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Report (FCC Form 396-A).

SECTION VII - CERTIFICATIONS

1. For new station and major change applicants only, the applicant certifies that it has or will comply with the public notice requirement of 47 C.F.R. Section 73.3580(g). ☒ Yes ☐ No

2. For applicants proposing translator rebroadcasts who are not the licensee of the primary station, the applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted. N/A ☐ Yes ☐ No

Primary station proposed to be rebroadcast:

Call Sign	City	State	Channel No.

3. The applicant certifies that it has contacted an authorized spokesperson for the owner of the rights to the proposed transmitter site and has obtained reasonable assurance that the site will be available for its use if this application is granted. ☐ Yes ☐ No

That person can be contacted at the following address and telephone number:

Name		Mailing Address or Identification	
Mr. Al Duddles, Gem Communications		200 West 36th Street	
City	**State**	**ZIP Code**	**Telephone No. (include area code)**
Boise	ID	83714	208-342-5421

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, or any substantial and significant changes in information furnished.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT. U.S. CODE, TITLE 18, SECTION 1001.

I certify that the statements in this application are true, complete and correct to the best of my knowledge and belief, and are made in good faith.

Name of Applicant	**Signature**
Trinity Christian Center of Santa Ana, Inc., d/b/a Trinity Broadcasting Network	Philip Crouch
Title	**Date**
Assistant Secretary	May 20, 1988

ENGINEERING REPORT

TRINITY BROADCASTING NETWORK

PROPOSED TELEVISION TRANSLATOR K47BE
CHANNEL 47 - BOISE, IDAHO

MAY, 1988

CONTENTS

SMITH AND POWSTENKO

BROADCASTING AND TELECOMMUNICATIONS CONSULTANTS

SUITE 600

2033 M STREET, N.W.

WASHINGTON, D.C. 20036

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of Television Translator K42BE, Channel 42 in Boise, Idaho, in support of its Application for Construction Permit for a "minor" change in its operating parameters. It is proposed herein to increase the effective antenna height, and decrease the effective radiated power.

No change in the location of the transmitter site is proposed. There exists at the site a 100-foot (34-meter) tower, and it is intended to mount the licensed Scala composite directional antenna at the 15-meter level of this tower, as shown in Exhibit B. Since the antenna is not considered to be an off-the-shelf model, its radiaiton characteristics are provided in Exhibit C. Terrain and contour data for both the licensed and proposed facilities, tabulated in Exhibit D, were used in the preparation of Exhibit E, a map upon which the predicted, protected 74 dbu contours for both facilities have been plotted.

As is clearly shown in Exhibit D, the proposed 74 dbu contour is completely contained within that of the licensed facility, making the changes proposed herein "minor" within the context of FCC Rules.

Since no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application.

Now that the FCC considers the purported biological effects of RF transmissions in its environmental determinations, we have studied the

EXHIBIT A

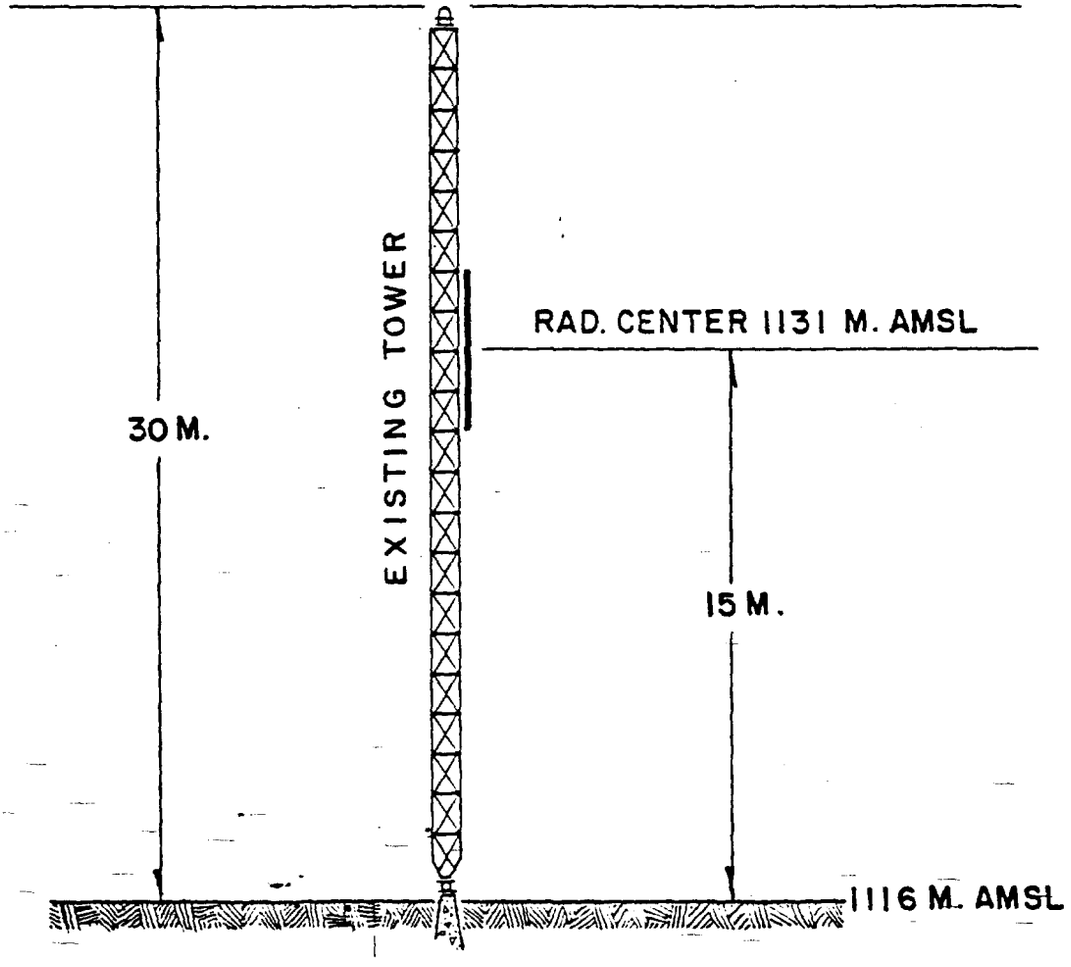
matter with respect to the instant proposal. Employing the methods set forth in *OST Bulletin No. 65*, and assuming an effective radiated power of 4.6 kw (average visual ERP plus aural ERP [considered to be 20 percent of peak visual ERP]), an effective antenna height of 15 meters above ground, and an antenna vertical relative field value of 10 percent at the steeper vertical angles, we calculate the maximum ground-level power density to be 0.007 mw/cm^2 at the base of the tower. Since this is less than one percent of the allowable 2.23 mw/cm^2 for a facility operating on Channel 47 (668-674 MHz), a grant of this proposal would clearly qualify as a minor environmental action with respect to non-ionizing electromagnetic radiation.

I declare, under penalty of perjury, that the foregoing statements and the attached Engineering Report, which was prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

KEVIN T. FISHER

May 16, 1988

NOT TO SCALE

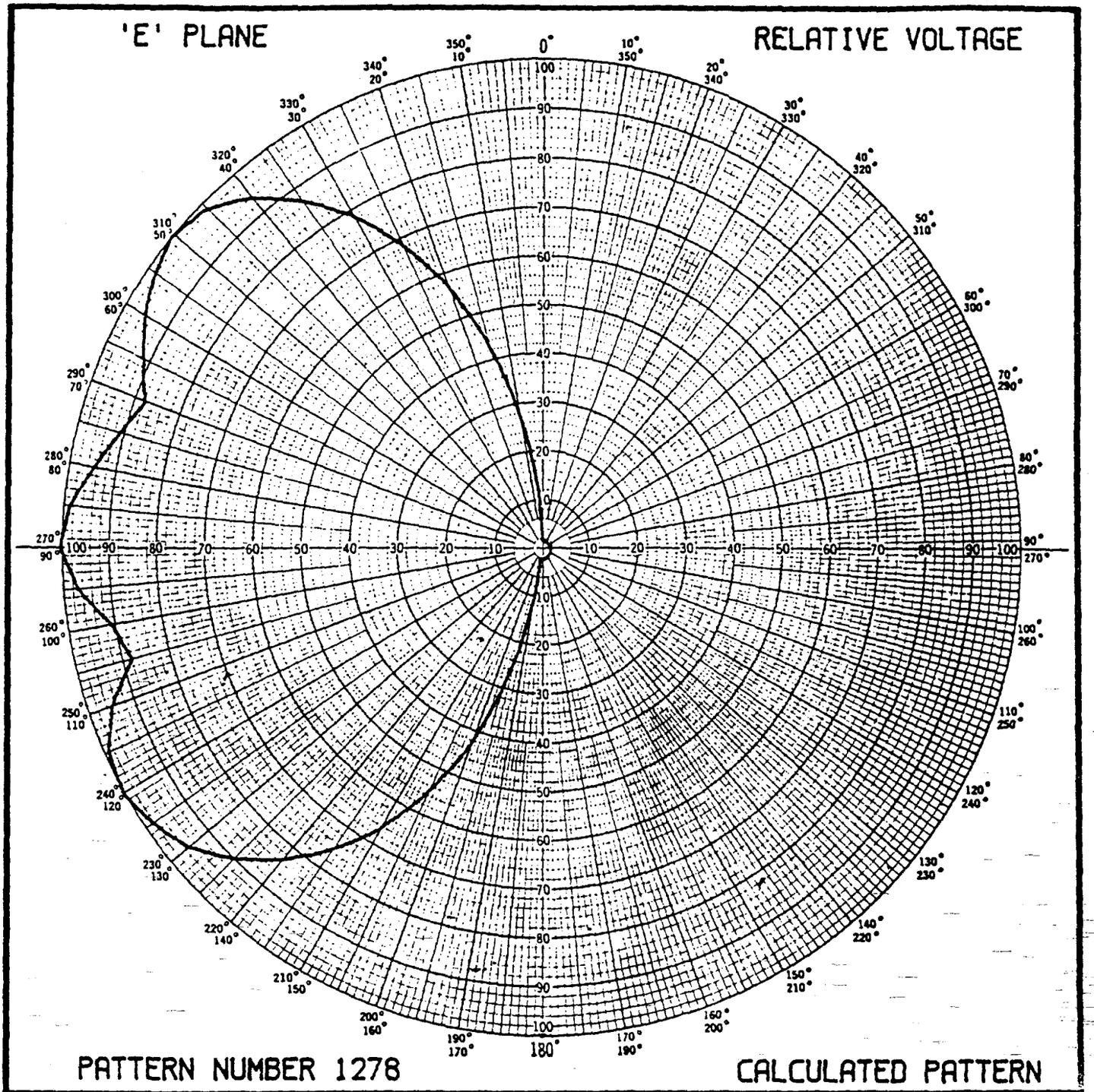


SITE COORDINATES:

43° 35' 41"
116° 08' 39"

EXHIBIT B

EXHIBIT C-1



SCALA
ELECTRONIC CORPORATION
POST OFFICE BOX 4580
MEDFORD, OREGON 97501
(503) 779-6500
TELEX: 151681

EIGHT SCALA CL-1483 LOG-PERIODICS
ORIENTED 4 EACH AT 240 AND 310 DEG.
MAXIMUM ARRAY GAIN: 9.5 dBd

EXHIBIT B-1

TRINITY BROADCASTING NETWORK, INC.

PROPOSED TELEVISION TRANSLATOR K47BE
CHANNEL 47 - BOISE, IDAHO

EXHIBIT C-2

ANTENNA RADIATION VALUES

TRINITY BROADCASTING NETWORK, INC.

PROPOSED TELEVISION TRANSLATOR K47BE
CHANNEL 47 - BOISE, IDAHO

Azimuth (° T)	Relative Field	ERP (dbk)	Azimuth (° T)	Relative Field	ERP (dbk)
0	.060	-15.6	180	.020	-25.1
10	.020	-25.2	190	.130	-8.9
20	.020	-25.2	200	.435	1.6
30	.020	-25.2	210	.665	5.3
40	.020	-25.2	220	.834	7.2
45	.020	-25.2	225	.890	7.8
50	.020	-25.2	230	.950	8.4
60	.020	-25.2	240	1.00	8.8
70	.020	-25.2	250	.945	8.3
80	.020	-25.2	260	.904	7.9
90	.020	-25.2	270	1.00	8.8
100	.020	-25.2	280	.946	8.3
110	.020	-25.2	290	.874	7.6
120	.020	-25.2	300	.950	8.4
130	.020	-25.2	310	1.00	8.8
135	.020	-25.2	315	.970	8.6
140	.020	-25.2	320	.945	8.3
150	.020	-25.2	330	.794	6.8
160	.020	-25.2	340	.585	4.2
170	.020	-25.2	350	.300	-1.6

EXHIBIT D-1

LICENSED TERRAIN AND CONTOUR DATA

TRINITY BROADCASTING NETWORK

PROPOSED TELEVISION TRANSLATOR K47BE
CHANNEL 47 - BOISE, IDAHO

Azimith (° T)	Average Elevation 2 to 10 Miles* (feet AMSL)	Effective Antenna Height (feet AAT)	ERP (dbk)	Distance to 74 dbu Contour (miles)
0	4169	-485	-15.3	1.3
45	4361	-677	-24.9	0.7
90	4033	-349	-24.9	0.7
135	3403	281	-24.9	1.0
180	3165	516	-24.9	1.3
225	2916	768	8.1	12.2
270	2730	954	9.1	14.5
315	2849	835	8.9	13.5

* Determined by computer (NGDC data base)

Antenna radiation center above mean sea level	3684 feet
Effective radiated power	8.14 kw
Antenna make and model	Scala CL-1483 Composite
Orientation	240°, 270°, 310° T

Geographic Coordinates

North latitude: 43° 35′ 41"
West longitude: 116° 08′ 39"

EXHIBIT D-2

PROPOSED TERRAIN AND CONTOUR DATA

TRINITY BROADCASTING NETWORK

PROPOSED TELEVISION TRANSLATOR K47BE
CHANNEL 47 - BOISE, IDAHO

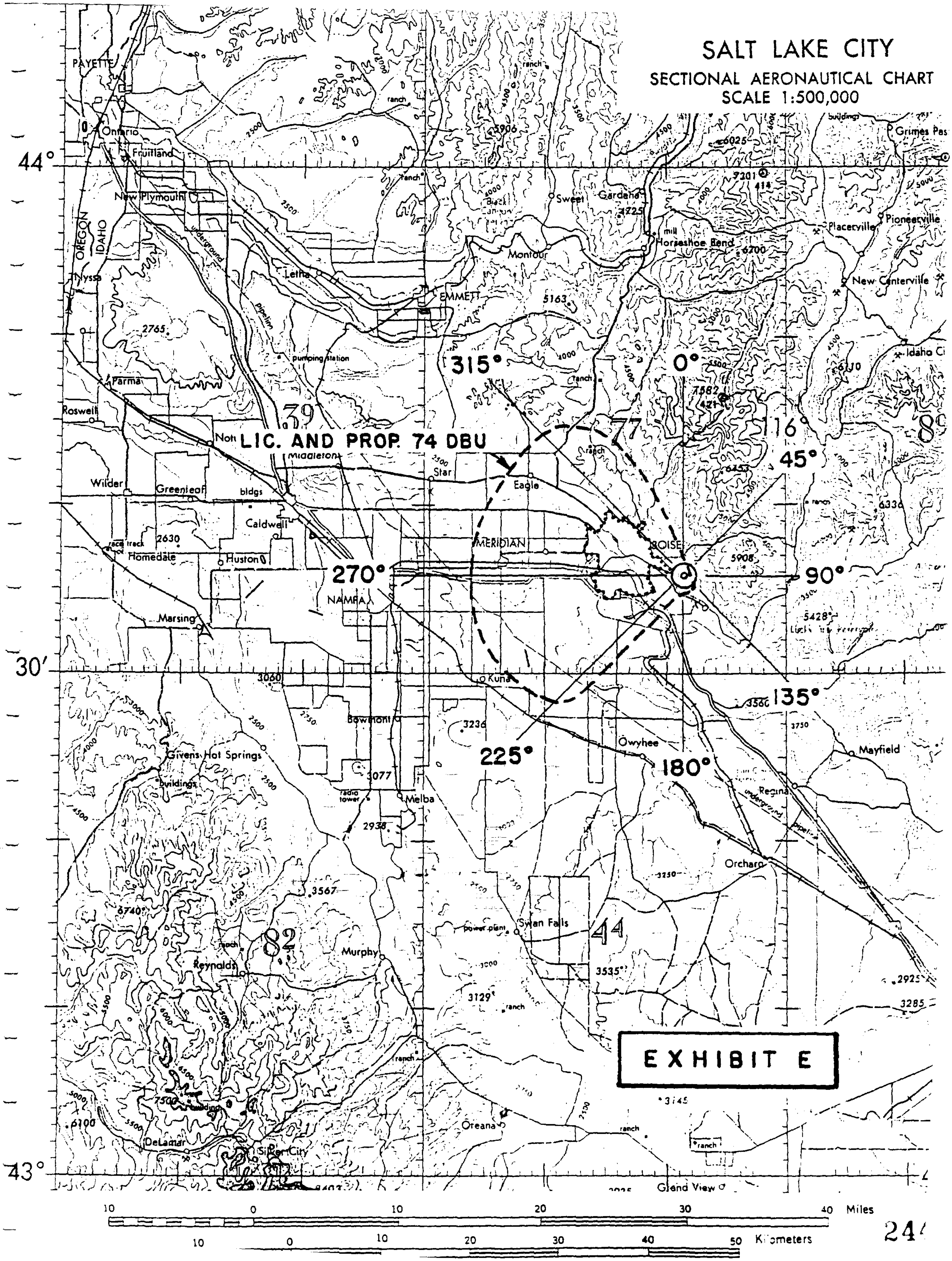
Azimith (° T)	Average Elevation 2 to 10 Miles* (feet AMSL)	Effective Antenna Height (feet AAT)	ERP (dbk)	Distance to 74 dbu Contour (miles)
0	4169	-458	-15.6	1.3
45	4361	-650	-25.2	0.7
90	4033	-322	-25.2	0.7
135	3403	308	-25.2	1.0
180	3168	543	-25.2	1.3
225	2916	795	7.8	12.2
270	2730	981	8.8	14.5
315	2849	862	8.6	13.5

* Determined by computer (NGDC data base)

Antenna radiation center above mean sea level	3711 feet
Effective radiated power	7.6 kw
Antenna make and model	Scala CL-1483 Composite
Orientation	240°, 270°, 310° T

Geographic Coordinates

North latitude: 43° 35′ 41"
West longitude: 116° 08′ 39"


SALT LAKE CITY
SECTIONAL AERONAUTICAL CHART
SCALE 1:500,000
LIC. AND PROP. 74 DBU
0°
45°
90°
135°
180°
225°
270°
315°
EXHIBIT E
44°
30'
43°
PAYETTE
Ontario
Fruitland
New Plymouth
OREGON
IDAHO
Nyssa
Parma
Roswell
Notus
Wilder
Greenleaf
Caldwell
Homedale
Huston
Marsing
NAMPA
MERIDIAN
BOISE
Eagle
Star
Middleton
Letha
EMMETT
Sweet
Gardena
Horseshoe Bend
Montour
Placerville
Pioneerville
New Centerville
Idaho City
Grimes Pass
Kuna
Bowmont
Owyhee
Mayfield
Regina
Orchard
Melba
Givens Hot Springs
Murphy
Reynolds
Swan Falls
Oreana
DeLamar
Silver City
Grand View
Miles
Kilometers

SECTION II - ENGINEERING DATA AND ANTENNA AND SITE INFORMATION

1. Facilities requested:

Output Channel No.	Transmitter Rated Power Output	Proposed Community(ies) to be served	
47	1.0 kilowatts	City: Boise	State: Idaho

Frequency Offset (check one)

[X] No offset [ ] Zero offset [ ] Plus offset [ ] Minus offset

Translator Input Channel No. Satcom - Transponder 3

2. Proposed transmitting antenna location:

City	State	County
near Boise	Idaho	Ada

Address or other description of location:

On existing tower at Table Rock, approximately 1.6 km. east of Boise

Geographical coordinates of transmitting antenna to nearest second

North Latitude: 43 ° 35 ' 41 "

West Longitude: 116 ° 08 ' 39 "

Attach as an Exhibit a map or maps (preferably topographic, if obtainable, such as Geological Survey quandrangles) of the area of the proposed transmitting antenna location shown drawn thereon the following data:

a. Scale of kilometers
b. Proposed transmitting antenna location accurately plotted.

Exhibit No. *

*On file - no change (BMPTTL-860407IC)

	Make	Type No.		Output Power P
3. Transmitter:	TTC	XL1000MU		0.961 kilowatts
4. Transmission line:	Andrew	LDF7-50A	Length: 80 feet	Rated efficiency E for length given (decimal fraction): 0.888

5. Transmitting antenna [ ] Directional "off-the-shelf" [X] Directional Composite (Multiple Antennas) [ ] Non-Directional

Manufacturer	Model	Description [1]
Scala	CL-1483 Composite	Log-periodic array

Orientation of main lobe [2]	Overall antenna structure height above ground [3]	Elevation of Site [4]	Power gain G (multiplier) in the horizontal lobe of maximum radiation relative to a halfwave dipole [5]
240°, 270°, 310° T	30 meters	1116 meters	8.91

Effective radiated power (ERP) (ERP=P X E X G) 7.6 kilowatts

Height of antenna radiation center above ground 15 meters

Height of antenna radiation center above above mean sea level 1131 meters [6]

1 Give basic type using general descriptive terms such as half-wave dipole, "bow-tie" with screen, corner reflector, 10 element Yagi, 4 element in-phase array, two stacked 5 element Yagis, etc.

2 For directional antennas in the horizontal plane show the direction of the main radiation lobe(s) in degrees with respect to true north in a 360 degree horizontal azimuth, numbered clockwise, with true north as zero azimuth.

3 Show overall height above ground in meters to topmost portion of structure, including highest top mounted antenna and beacon if any.

4 Show the ground elevation above mean sea level in meters at the base of the transmitting antenna supporting structure.

5 Give the actual power gain toward the radio horizon.

6 This is equal to the sum of the site elevation and the height of the antenna radiation center above ground.

Section II (Page 2)

6. Attach as an Exhibit a vertical plan sketch for the proposed total antenna structure, including supporting structure, giving overall height of structure in meters above ground, including lighting beacon (if any). Exhibit No. C

7. Will the proposed antenna supporting structure be shared with an AM radio station? ☐ Yes ☒ No

If yes, list the call sign of that station. Does not apply

8. Attach as an Exhibit a polar diagram of the radiation pattern (relative field) in the horizontal plane of the transmitting antenna showing clearly the correct relationship between the major lobe or lobes and the minor lobes of radiation and a tabulation of the pattern at every ten degrees and all maxima and minima. Applicants proposing use of multiple transmitting antennas shall submit a composite radiation pattern. If a non-directional transmitting antenna will be employed, i.e., an antenna with an approximately circular radiation pattern, check here ☐ and omit polar diagram and tabulation. If the antenna manufacturer and model number are on the Commission's list of common "off-the-shelf" directional antennas, check here ☐ and omit polar diagram and tabulation. Exhibit No. B

9. Has FAA been notified of proposed construction ? ☐ Yes ☒ No

If Yes, give date and office where notice was filed: --

No change in overall height or location of existing structure

10. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within 47 C.F.R. 1.1307, such that it may have a significant environmental impact, including exposure to workers or the general public to harmful nonionizing radiation levels? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment as required by Section 1.1311. If no, explain briefly why not. Exhibit No. --

Proposal complies with pertinent provisions of Sections 1.1305, 1.1306, and 1.1307 of FCC Rules. *(See also Exhibit A of Engineering Report)*

11. Unattended operation:

Is unattended operation proposed? ☒ Yes ☐ No

If Yes, and this application is for authority to construct a new station or to make changes in the facilities of an authorized station which proposes unattended operation for the first time, applicant will comply with the requirements of 47 C.F.R. Section 74.734 concerning unattended operation. ☒ Yes ☐ No

12. Is type approved broadcast equipment being specified? ☒ Yes ☐ No

If No, indicate date equipment was submitted to FCC Laboratory for approval. --

Does not apply

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

May 16, 1988
Date

Signature K. T. F.

Typed or Printed Name KEVIN T. FISHER

Telephone No. (include area code) (202) 293-7742

☐ Technical Director ☐ Registered Professional Engineer ☒ Consulting Engineer

☐ Chief Operator ☐ Other (specify)